CA 160 Installation Instructions

PROFESSIONAL INSTALLATION <u>STRONGLY RECOMMENDED</u>

Installation Precautions:

Roll down window to avoid locking keys in vehicle during installation

Avoid mounting components or routing wires near hot surfaces

Avoid mounting components or routing wires near moving parts

Tape or loom wires under hood for protection and appearance

Use grommets when routing wires through metal surfaces

Use a Digital Multi Meter for testing and verifying circuits. DO NOT USE A TEST LIGHT, OR "COMPUTER SAFE PROBE" as these can set off air bags or damage vehicle computers.

Technical Support

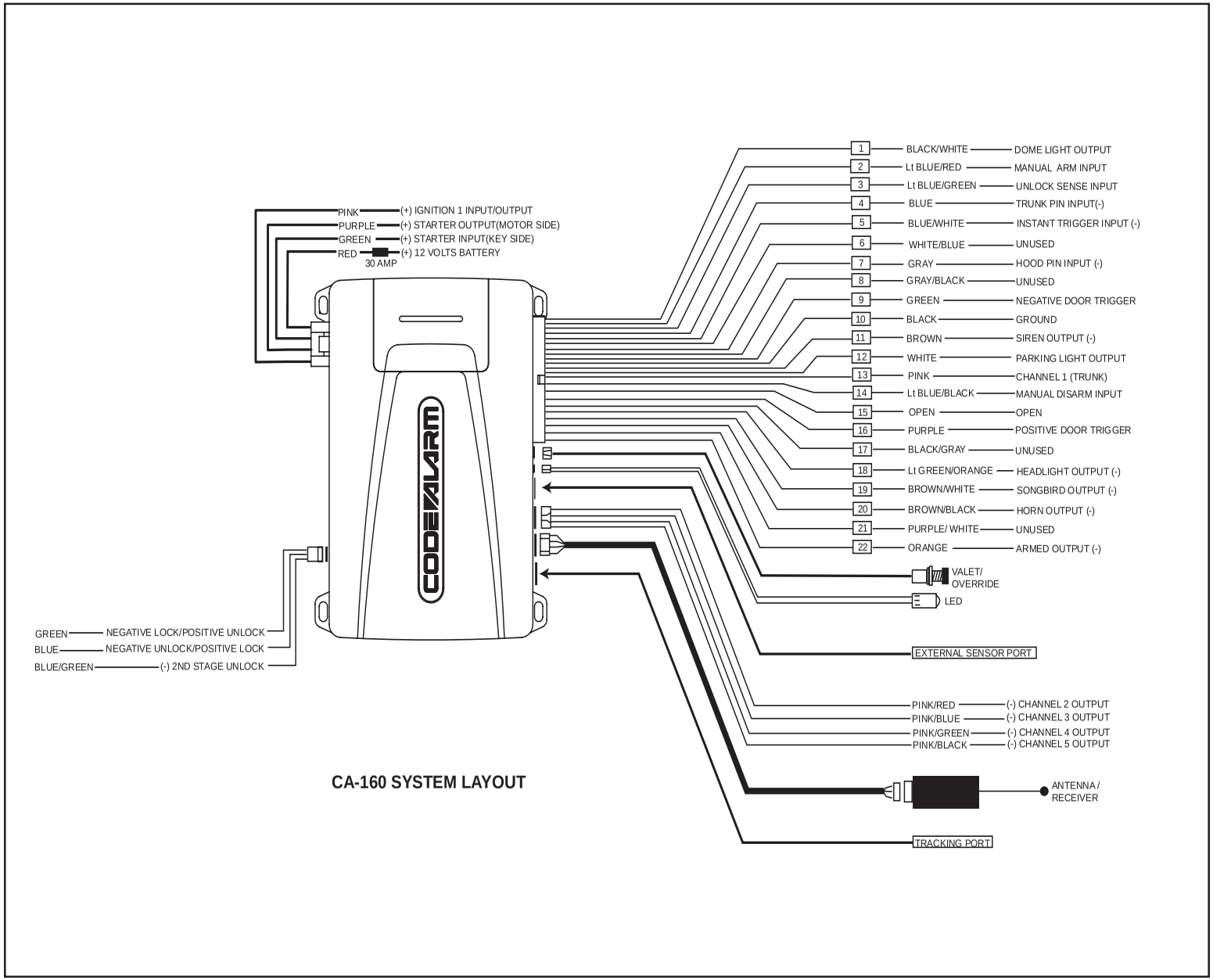
For Authorized Dealers - (800) 421-3209

FCC COMPLIANCE

This device complies with Part 15 of the FCC rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

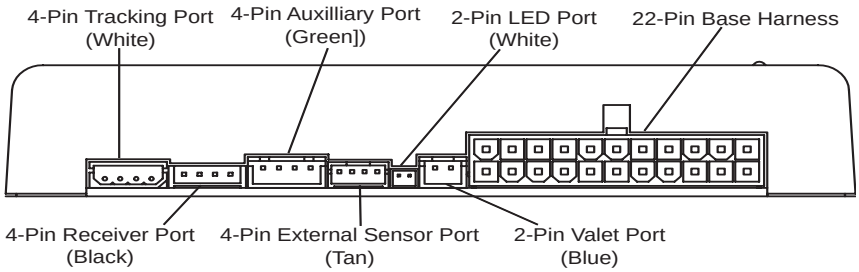
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including any interference that may cause undesired operation.

Warning! Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.


PINK (+) IGNITION 1 INPUT/OUTPUT
PURPLE (+) STARTER OUTPUT(MOTOR SIDE)
GREEN (+) STARTER INPUT(KEY SIDE)
RED (+) 12 VOLTS BATTERY
30 AMP
CODE ALARM
GREEN NEGATIVE LOCK/POSITIVE UNLOCK
BLUE NEGATIVE UNLOCK/POSITIVE LOCK
BLUE/GREEN (-) 2ND STAGE UNLOCK
1 BLACK/WHITE DOME LIGHT OUTPUT
2 Lt BLUE/RED MANUAL ARM INPUT
3 Lt BLUE/GREEN UNLOCK SENSE INPUT
4 BLUE TRUNK PIN INPUT(-)
5 BLUE/WHITE INSTANT TRIGGER INPUT (-)
6 WHITE/BLUE UNUSED
7 GRAY HOOD PIN INPUT (-)
8 GRAY/BLACK UNUSED
9 GREEN NEGATIVE DOOR TRIGGER
10 BLACK GROUND
11 BROWN SIREN OUTPUT (-)
12 WHITE PARKING LIGHT OUTPUT
13 PINK CHANNEL 1 (TRUNK)
14 Lt BLUE/BLACK MANUAL DISARM INPUT
15 OPEN OPEN
16 PURPLE POSITIVE DOOR TRIGGER
17 BLACK/GRAY UNUSED
18 Lt GREEN/ORANGE HEADLIGHT OUTPUT (-)
19 BROWN/WHITE SONGBIRD OUTPUT (-)
20 BROWN/BLACK HORN OUTPUT (-)
21 PURPLE/ WHITE UNUSED
22 ORANGE ARMED OUTPUT (-)
VALET/ OVERRIDE
LED
EXTERNAL SENSOR PORT
PINK/RED (-) CHANNEL 2 OUTPUT
PINK/BLUE (-) CHANNEL 3 OUTPUT
PINK/GREEN (-) CHANNEL 4 OUTPUT
PINK/BLACK (-) CHANNEL 5 OUTPUT
ANTENNA / RECEIVER
TRACKING PORT

CA-160 SYSTEM LAYOUT

CA- 160 System Layout



4 Pin Auxiliary Harness (GREEN)

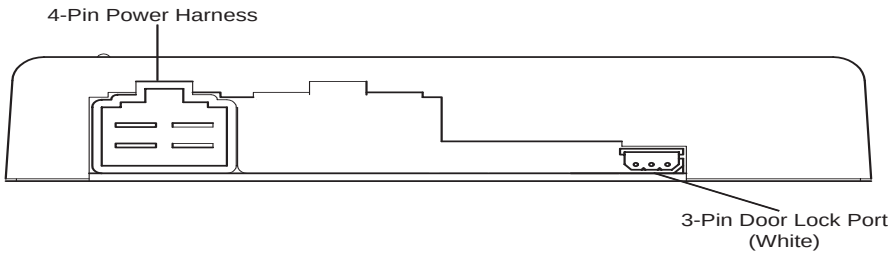
1	CHANNEL 2	PINK/BLACK
2	CHANNEL 3	PINK/GREEN
3	CHANNEL 4	PINK/BLUE
4	CHANNEL 5	PINK/RED

4 Pin 2nd Sensor Port (TAN)

1	PREWARN	BLUE
2	FULL TRIGGER	DK. GREEN
3	GROUND	BLACK
4	12 VOLTS	RED

22 Pin Base Harness

1	DOME LIGHT OUTPUT	BLACK/WHITE
2	MANUAL ARM INPUT	LT.BLUE/RED
3	UNLOCK SENSE INPUT	LT.BLUE/GREEN
4	TRUNK PIN INPUT	BLUE
5	INSTANT TRIGGER INPUT	BLUE/WHITE
6	UNUSED	WHITE/BLUE
7	HOOD PIN INPUT	GRAY
8	UNUSED	GRAY/BLACK
9	NEGATIVE DOOR TRIGGER	GREEN
10	GROUND	BLACK
11	SIREN OUTPUT (+)	BROWN
12	PARKING LIGHTS	WHITE
13	CHANNEL 1	PINK
14	MANUAL DISARM INPUT	LT.BLUE/BLACK
15		
16	POSITIVE DOOR TRIGGER	PURPLE
17	UNUSED	BLACK/GRAY
18	HEADLIGHT OUTPUT	LT.GREEN/ORANGE
19	SONGBIRD OUTPUT	BROWN/WHITE
20	HORN OUTPUT	BROWN/BLACK
21	UNUSED	PURPLE/WHITE
22	ARMED OUTPUT	ORANGE

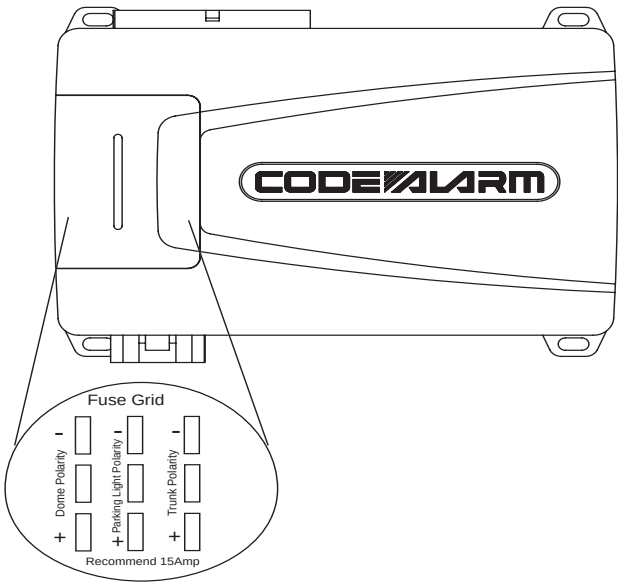


4 Pin Power Harness

1	+ 12 VOLTS	RED
2	STARTER INPUT (Keyside)	GREEN
3	STARTER OUTPUT(Motor Side)	PURPLE
4	IGN 1 Input/Output	PINK

3 Pin Door Lock Harness

1	NEG LOCK/POS UNLOCK	GREEN
2	NEG UNLOCK/POS LOCK	BLUE
3	2ND STAGE UNLOCK	BLUE/GREEN



Programming Options

RF Programmer

The RF Programmer allows you to customize the system to fit the individual needs of the consumer, using a handheld device capable of transmitting system settings directly to the system control module. The RF Programmer is broken down into three different programming banks.

1. **RF Programmer Bank-** The system control module included with the CA-160 is known as a "Master Module", which means that the control module is equipped with the ability to operate as one of several different types of systems. The RF Programmer Bank allows you to set up the base features of the system you are installing. It is very important to understand that the base features of this system can only be programmed using the RF Programmer. Please refer to the chart below showing factory default settings to determine what options need to be changed for your system. When using the RF Programmer to select feature settings is very important to verify that the correct base features remain at the default settings.

CA-160 RF Programmer Base Features

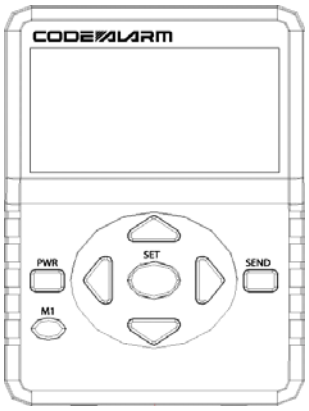
Feature	Default Setting
Security	ON
Remote Start	OFF
1 Way/2 Way TX	2 Way TX

2. **Feature Bank 1-** Feature Bank 1 allows you to turn On/Off customer convenience features.
3. **Feature Bank 2-** Feature Bank 2 allows you to turn On/Off remote start features.

Manual Feature Programming

After installation is complete it will be necessary to program certain system characteristics that can't be programmed using the RF Programmer (Shock Sensor settings). In addition all of the customer convenience features and remote start features.

RF Programmer



Selecting Programmable Features

1. Press the POWER button to turn the system ON.

2. Once powered up the MENU screen will be displayed.

3. Use the UP & DN arrows to scroll through the programmable features. Once you locate the desired feature to change, press the **>** arrow to advance to the next screen. You should see the default setting of the system

4. Press the SET button to scroll through the available settings. Once the desired setting is shown on the screen, press the **<** to return to the feature chart selectable options or press SEND to transmit to the system you are installing.

NOTE: You must access the RF receive bank on Option programming to SEND the selected information to the CA 160, please refer to the programming section on the next page.

Using the M1 function

The RF Programmer has a memory function that will allow you to store the 4 most common feature settings.

Once you have selected the settings that you want to store press and hold M1 button for 3 seconds. A menu will appear which will allow you to select the memory bank you wish to save the desired feature setting into.

Press the SET button to store the setting into memory. The menu will display "Write to memory **X**"

To retrieve a stored feature setting, press and release the M1 button. A menu will appear that will allow you to select the desired memory bank.

Press SET to retrieve the desired stored memory bank. The menu will display "Read from memory **X**"

CA 160 Programming Guide

Feature Bank 0 - 3 Chirps	***Transmitter Programming***			
Feature Bank 1 - 4 Chirps	***RF Programmer Receive Bank***			
Feature Bank 2 - 5 Chirps	*Shock Sensor Programming (W/Transmitter Only)*			
Lite Touch Adjustment	Lock increases sensitivity, Unlock decreases sensitivity			
Full Trigger Adjustment	Lock increases sensitivity, Unlock decreases sensitivity			

Feature Bank 3 - 6 Chirps	*1 LED Flash*	*2 LED Flashes*	*3 LED Flashes*	*4 LED Flashes*
Extended Lock Pulse	**1 Second**	3.5 Seconds	1 Sec L, Dbl U/L	30 Sec Lk/1 Sec U/L
Ignition Controlled Lock	**ON**	OFF		
Ignition Controlled Unlock	UNLOCK ALL	Driver Door Only	**OFF**	
Headlights	Active w/ARM	Active w/DISARM	**Active w/BOTH**	OFF
Passive Locks	Passive	**Active**		
Passive/Active Arming	Passive	**Active**		
Siren/Horn	**Siren/Horn**	Siren	Horn	
Horn Output Timing	10mS	**16mS**	30mS	40mS
Custom Code	ON	**OFF**		
2nd Step Unlock	ON	**OFF**		
Chirp Delete from TX	ON	**OFF**		
Trunk Output Timing	**Push & Hold**	20 Sec.		
AUX 1 Timing	**Push & Hold**	10 Seconds	20 Seconds	Latched
AUX 2 Timing	**Push & Hold**	10 Seconds	20 Seconds	Latched
AUX 3 Timing	**Push & Hold**	10 Seconds	20 Seconds	Latched
AUX 4 Timing	**Push & Hold**	10 Seconds	20 Seconds	Latched

Feature Bank 4 - 7 Chirps	*1 LED Flash*	*2 LED Flashes*	*3 LED Flashes*	*4 LED Flashes*
RF Start Chirp	OFF	**ON**		
Run Time	5 Minutes	10 Minutes	**15 Minutes**	20 Minutes
Running Lights	**ON Steady**	Flashing		
Tach Mode	Tachless Mode	**Tach Mode**		
Voltage Level	**>.5V B4 Start**	<.5V B4 Start		
Crank Average/Crank Time	**Averaging**	Preset Time		
Crank Time	.8 Seconds	**1.0 Seconds**	1.5 Seconds	2.0 Seconds
Gas/Diesel	**Gas**	10 Sec Delay	15 Sec Delay	20 Sec Delay
Trans Bypass O/P	**while RS ON**	During Start	Until IGN OFF	
Temp Controlled Start	**OFF**	ON		
Single/Double Pulse Start	Single BTN Press	**Double BTN Press**		

1. SETUP & PROGRAMMING

Transmitter Programming (3 Chirps)

1. With the door open turn the ignition ON
2. Press and Hold the valet/override button.
3. Within 10 Seconds the system will chirp (3) three Times
4. Press Button 1 of each transmitter you wish to program.
5. The system will respond with 1 chirp for each accepted transmitter.

Pressing the override button at anytime during programming will advance to the next bank.
Note: This system has 1 button programming which programs all channels of the system

RF Programmer Receive (4 Chirps)

Note: Using the RF Programmer, program all settings prior to following the steps below.

1. With the door open turn the ignition ON
2. Press and Hold the valet/override button.
3. Within 10 Seconds the system will chirp (3) three times (If in Transmitter programming simply press the valet/override button once to advance to the desired feature bank)
4. Press the valet/override button again, The system will chirp (4) Four Times
5. Press SEND on the RF Programmer to set all Features and Setting of this system.
6. The unit will flash the Parking lights and emit (2) Long chirps indicating a successful program.

Shock Sensor Programming (5 Chirps)

1. With the door open turn the ignition ON
2. Press and Hold the valet/override button.
3. Within 10 Seconds the system will chirp (3) three Times (If in RF programming simply press the valet/override button to advance to the desired feature bank)
4. Use the valet/override button to advance through each option bank. For Shock Sensor programming advance to shock sensor programming bank which is (5) Five chirps.
5. Use the transmitter OPT button to scroll through the selections in each feature bank.
6. Press transmitter LOCK button to increase sensitivity and transmitter UNLOCK button to decrease sensitivity

NOTE: There are 64 levels of adjustment for each option. Once the highest/lowest sensitivity are achieved, the sire/horn will sound an extended pulse to notify that you are at the end of the scale. Decreasing sensitivity one more step from the lowest end of the scale will shut that zone off

Manual Feature Bank Programming 3 & 4 (6/7 Chirps) without RF programmer

1. With the door open turn the ignition ON
2. Press and Hold the valet/override button.
3. Within 10 Seconds the system will chirp (3) three Times (If in Shock Sensor programming simply press the valet/override button to advance to the desired feature bank)
4. Use the valet/override button to advance through each option bank. For feature programming advance to Feature Bank 1 & 2 which is (6) six chirps and (7) seven chirps.
5. Use the transmitter OPT Button to scroll through the selections in each feature bank.
6. Press the transmitter LOCK Button to change the desired feature. The LED will flash indicating the changed feature.

The system will remain in programming mode as long as the ignition is on and the door is opened, there is no time limit. To exit programming turn the IGNITION OFF

1. 4 PIN MAIN POWER HARNESS

Battery Power (RED)

Locate the vehicle's battery wire(s) at the ignition switch.
Verification: These wires will register voltage in all positions of the ignition switch.

▶ Connect the RED wire to the vehicle's battery wire.

Note: Remove all 30 Amp fuses until all connections are made

12 volts Ignition Input/Output (PINK)

Locate the vehicle's Ignition wire at the ignition switch.

Verification: This wire registers voltage when the key is turned to the ON (or RUN) position. The voltage does not drop out when the key is turned to the START (or CRANK) position.

▶ Connect the PINK wire to the vehicle's Ignition wire.

▶ This wire is also used for Ignition 1 Output.

Starter Input (Key Side) (GREEN)

Starter Output (Motor Side) (PURPLE)

Locate the vehicle starter wire.

Verification: This wire registers voltage *only* when the key is turned to the START position. Cut the vehicle starter wire in half.

Verification after starter wire is cut:

- KEY SIDE of starter wire registers voltage when the key is turned to the START position.
- MOTOR SIDE of starter wire registers no voltage.

▶ Connect the GREEN wire to the KEY SIDE of the vehicle starter wire at the ignition switch harness.

▶ Connect the PURPLE wire to the MOTOR SIDE of the vehicle starter wire.

2. BASIC INSTALLATION - 22 PIN BASE HARNESS

Dome Light Supervision Output (+/-) (BLACK/WHITE)

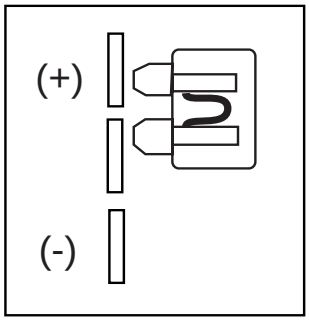
Locate the vehicle's dome light or pin switch wire

Verification: This wire will register positive voltage or ground when the vehicle's dome is turned ON. Typically this wire is installed with the door trigger input wire. Refer to NEG/POS door input for reference.

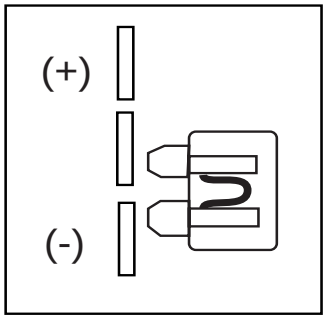
To select Negative or Positive polarity output.:

- Refer to Fuse Placement Diagram below.

Positive Polarity Output



Negative Polarity Output



Negative Door Input (GREEN)

Locate the vehicle's dome light or door pin switch wire.

Verification: This wire will register ground (NEG) when the door is opened and the interior light is on. This wire will register positive voltage when the door is closed and the interior light is off.

- Connect the GREEN wire to the vehicle's negative door input wire(s).

Positive Door Input (PURPLE)

Locate the vehicle's dome light or door pin switch wire.

Verification: This wire will register positive voltage(POS) when the door is opened and the interior light is on. This wire will register ground or "0" Volts when the door is closed and the interior light is off.

- Connect the PURPLE wire to the vehicle's negative door input wire(s).

Chassis Ground Source (BLACK)

- Connect the BLACK wire to a solid chassis ground point using a ring terminal and self tapping screw (not supplied). Scrape away paint from the grounding point to ensure a good connection. The recommended grounding point is a painted metal surface in the driver's side kick panel area.

Note: Do not ground the BLACK wire with any other vehicle components.

2. 22 PIN BASE HARNESS CONTINUED

Ground When Armed Output (ORANGE)

- This wire will show Ground when the system is Armed

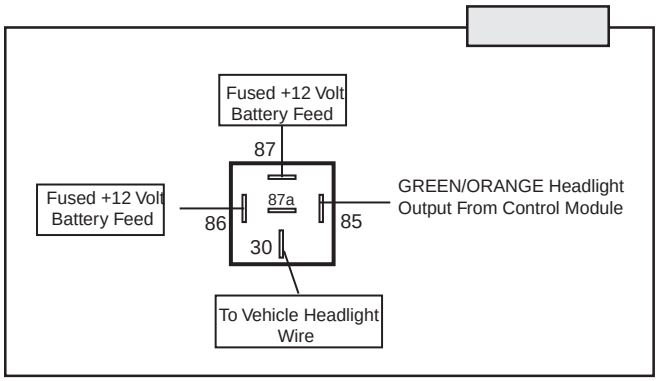
This wire is used for controlling window modules or additional sensors

Headlight Output (LT. GREEN/ORANGE)

Locate the vehicle's headlight wire

Verification: This wire will register either positive voltage or ground when the headlights are turned on

- Connect the LT. GREEN/ORANGE to the vehicles headlight wire if the system is negative. (LOW CURRENT ONLY)
- Connecting to a Positive Headlight Output.



Hood Pin Input (GRAY)

Install a Hood Pin Switch and connect to the GRAY wire. This connections is required for Remote Start

Verification: This wire when connected will register ground when the vehicle hood is opened

- Connect the GRAY wire to the hood pin.

Note: Be sure to loom the wire, and seal the grommet with 3M caulk.

Low Current Horn Output (BROWN/BLACK)

Locate the vehicle's horn wire at the steering column.

Verification: This wire will rest at positive voltage and register ground when the horn switch is pressed.

- Connect the BROWN/BLACK wire to the vehicle's horn wire.

2. 22 PIN BASE HARNESS CONTINUED

Instant Trigger Input (BLUE/WHITE)

This wire is a GROUND input for an external sensor or secondary pin switch

Verification: This wire when connected will trigger the security system

Siren Output (+) (BROWN)

Locate a suitable mounting location in the engine compartment for the siren, away from moving parts.

- With the bell of the siren aiming downwards, secure the siren in place using self tapping screws, being careful not do drill into any hoses, wiring or components.
- Connect the BLACK siren wire to a chassis ground using a ring terminal and self tapping screw (not supplied).
- Route the BROWN siren output wire from the control module through the firewall and connect to the RED wire on the siren.

Note: Be sure to loom the wire/wires, and seal the grommet with 3M caulk.

Parking Light Output (+/-) (WHITE)

Locate the vehicle's parking light wire at the vehicle light switch

Verification: This wire will register positive voltage or ground when the vehicle parking light switch is turned to the ON position.

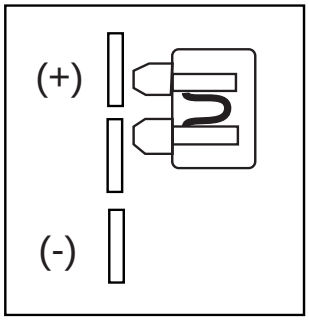
Positive Polarity Systems:

- Connect the WHITE wire to the vehicle's parking light wire at the light switch. Refer to Fuse Placement Diagram below

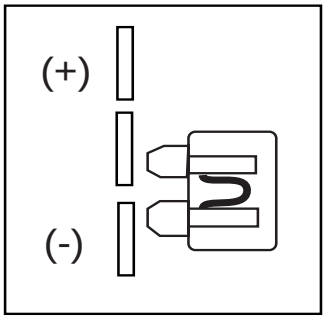
Negative Polarity Systems:

- Connect the WHITE wire to the vehicle's parking light wire at the light switch. Refer to Fuse Placement Diagram below

Positive Polarity Output



Negative Polarity Output



2. 22 PIN BASE HARNESS CONTINUED

Manual ARM input (LT. BLUE/RED)

- This wire will ARM the security system when a POS or NEG pulse is applied to it from an external device.

Manual DISARM Input (LT. BLUE/BLACK)

- This wire will DISARM the security system when a POS or NEG pulse is applied to it from an external device.

Unlock Switch Sense (LT. BLUE/GREEN)

- This wire will prevent the system from disarming the security system when a POS or NEG pulse is applied to it from an external device. This will prevent the system from disarming if it is pulsed at the same time as the LT. BLUE/BLACK (Manual Disarm Input) wire.

For example: To prevent the system from disarming from the switch on the door. Connect this wire to the unlock switch or passenger unlock motor wire

NOTE: Only required if using the factory keyless entry transmitter to arm/disarm this system.

Song Bird Output (BROWN/WHITE) SB1 Accessory required

This wire controls the SB1 accessory (Not Included)

- Connect this wire to one of the WHITE/BLACK wires from the SB1

Trunk Pin Switch Input (-) (BLUE)

- Connect the BLUE wire to an optional grounding type trunk pin switch.

2. 22 PIN BASE HARNESS CONTINUED

Trunk Release Output (+/-) (PINK)

Locate the vehicle's trunk release wire at the trunk release switch.

Verification: This wire will register either positive voltage or ground when the trunk release is activated.

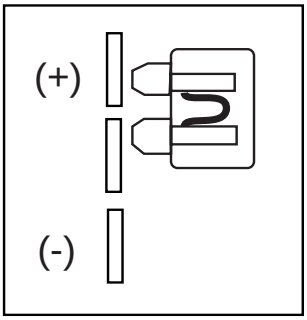
Positive Polarity Systems:

- Connect the PINK wire to the vehicle's trunk release wire. Refer to Fuse Placement Diagram below

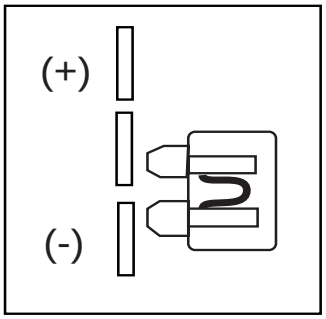
Negative Polarity Systems:

- Connect the PINK wire to the vehicle's trunk release wire. Refer to Fuse Placement Diagram below

Positive Polarity Output



Negative Polarity Output



3. 4 PIN ADVANCE CHANNEL HARNESS

Channel 2 (PINK/BLACK)

This wire provides a 500mA negative output capable of driving relays. For Control of optional accessories (i.e. Power Window/Sunroof,etc.).

- To Activate press and hold LOCK & TRUNK. Please refer to the selectable options for timing.

Selectable timing: Push & Hold/10 Seconds/20 Seconds/Press to Latch ON/Press to Latch OFF

Channel 3 (PINK/GREEN)

This wire provides a 500mA negative output capable of driving relays. For Control of optional accessories (i.e Power Window/Sunroof,etc.).

- To Activate press and hold opt sor 2 seconds. Please refer to the selectable options for timing.

Selectable timing: Push & Hold/10 Seconds/20 Seconds/Press to Latch ON/Press to Latch OFF

Channel 4 (PINK/BLUE)

This wire provides a 500mA negative output capable of driving relays. For Control of optional accessories (i.e Power Window/Sunroof,etc.).

- To Activate press and hold LOCK & OPT. Please refer to the selectable options for timing.

Selectable timing: Push & Hold/10 Seconds/20 Seconds/Press to Latch ON/Press to Latch OFF

Channel 5 (PINK/RED)

This wire provides a 500mA negative output capable of driving relays. For Control of optional accessories (i.e Power Window/Sunroof,etc.).

- To Activate press and hold UNLOCK & OPT. Please refer to the selectable options for timing.

Selectable timing: Push & Hold/10 Seconds/20 Seconds/Press to Latch ON/Press to Latch OFF

4. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (BLUE/GREEN)

The door lock / unlock outputs are designed to control several different types of systems which may require additional parts. Please review the wire and location chart to see which type of door lock system is in your vehicle. The most common types are shown in the diagrams below.

Negative Switching and Negative Switching with 2-step unlock feature:

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: These wires will register ground when the Lock and Unlock switches are activated.

Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

▶ Connect the GREEN and BLUE or BLUE/GREEN wires shown in diagram 6 below.

Note: When adding the 2 step unlock feature the BLUE/GREEN 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. An additional SPDT relay (not supplied) (Code Alarm part HDRLY) is required. Connect the relay as shown in diagram 7 to unlock the driver's door on the first press of unlock.

Diagram 6

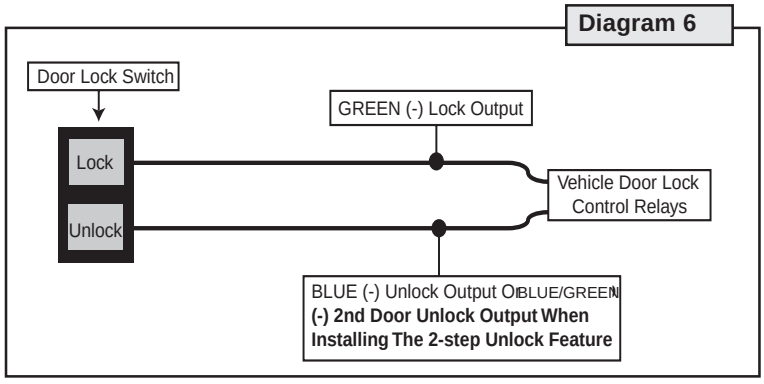
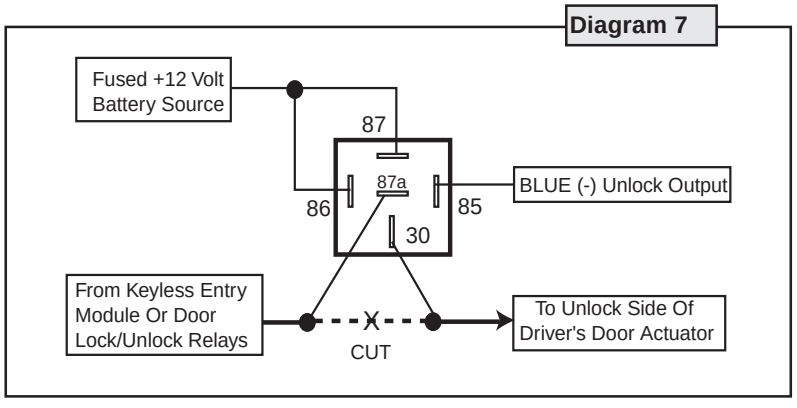

Door Lock Switch
GREEN (-) Lock Output
Lock
Unlock
Vehicle Door Lock Control Relays
BLUE (-) Unlock Output OrBLUE/GREEN
(-) 2nd Door Unlock Output When Installing The 2-step Unlock Feature

Diagram 7



4. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (BLUE/GREEN)

Positive Switching and Positive Switching with 2-step unlock feature:

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: These wires will register positive voltage when the Lock and Unlock switches are activated.

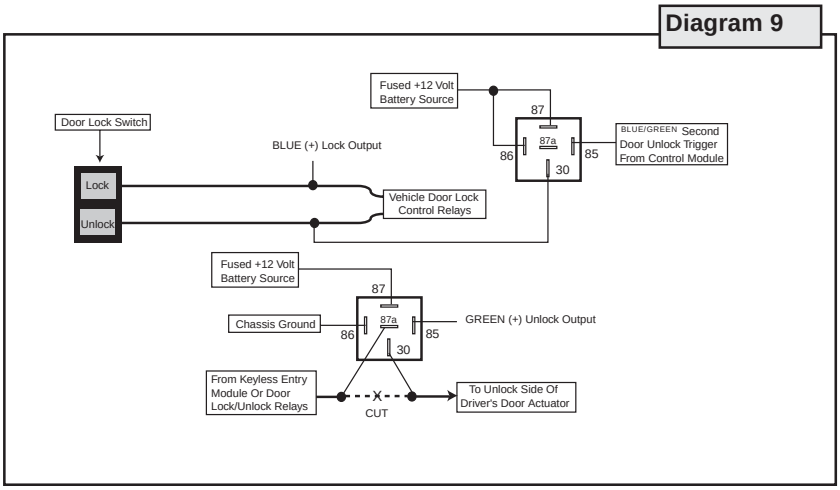
Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

▶ Connect the GREEN and BLUE or BLUE/GREEN wires shown in diagram 8 below.

Note: When adding the 2 step unlock feature the BLUE/GREEN 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. Two additional SPDT relays (not supplied) (Code Alarm part HDRLY) are required. Connect the relays as shown in diagram 9 to unlock the driver's door on the first press of unlock.

Diagram 9



4. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (BLUE/GREEN)

Reverse Polarity (5-Wire Doorlocks) and Reverse Polarity with 2-step Unlock

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: These wires will rest at ground and register positive voltage when the Lock and Unlock switches are activated.

Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

▶ Connect the GREEN and BLUE or BLUE/GREEN wires shown in diagram 10 below. Use (1) Code Alarm part DLRK (Door Lock Relay Kit, not supplied) or (2) Code Alarm part HDRLY (SPDT relay, not supplied).

Note: When adding the 2 step unlock feature the BLUE/GREEN 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. An additional SPDT relay (not supplied) (Code Alarm part HDRLY) is required. Connect the relays as shown in diagram 11 to unlock the driver's door on the first press of unlock

Diagram 10

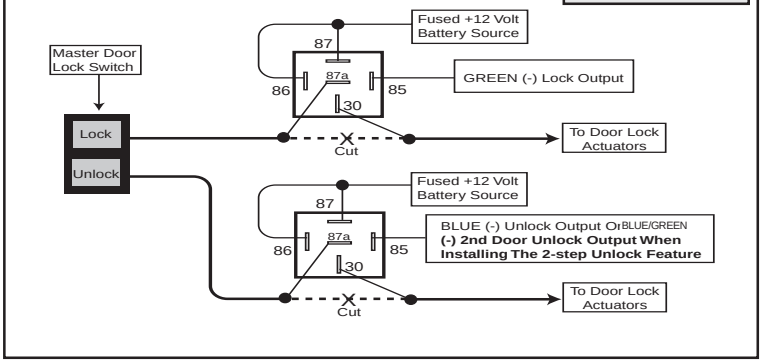
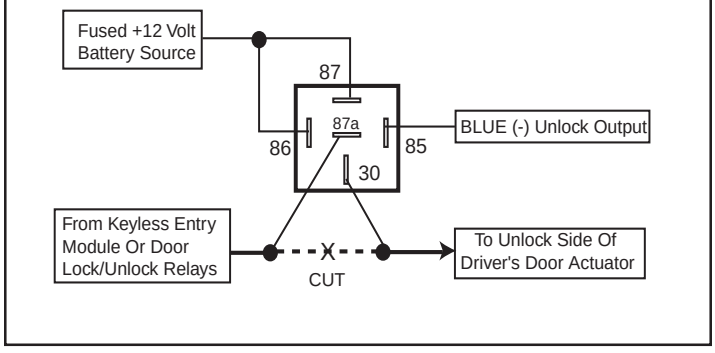


Diagram 11



4. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (BLUE/GREEN)

One Wire Negative Multiplexed and One Wire Negative Multiplexed with 2-step Unlock Feature

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: This wire will show variable ground when the switch is activated. Please consult the wire and location chart for specific resistor values for your vehicle.

Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

▶ Connect the GREEN and BLUE or BLUE/GREEN wires shown in diagram 12 below. Use (1) Code Alarm part DLRK (Door Lock Relay Kit, not included) or (2) Code Alarm part HDRLY (SPDT relay, not included).

Note: When adding the 2 step unlock feature the BLUE/GREEN 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. An additional SPDT relay not supplied (Code Alarm part HDRLY) is required. Connect the relay as shown in diagram 13 to unlock the driver's door on the first press of unlock

Diagram 12

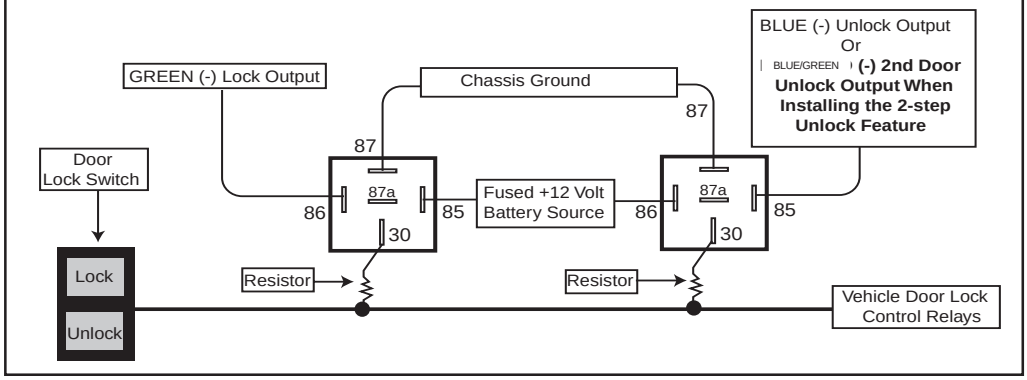
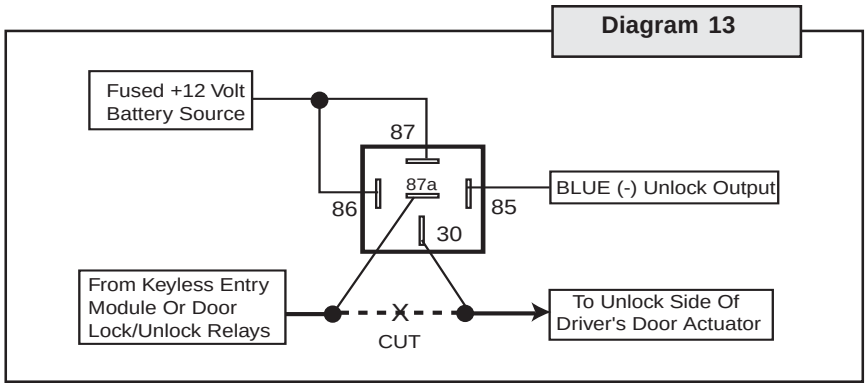


Diagram 13



4. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (BLUE/GREEN)

One Wire Positive Multiplexed and One Wire Multiplexed With 2-step Unlock Feature

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: This wire will show variable positive voltage when the switch is activated. Please consult the wire and location chart for specific resistor values for your vehicle.

Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

▶ Connect the GREEN and BLUE or BLUE/GREEN wires shown in diagram 14 below. Use (1) Code Alarm part DLRK (Door Lock Relay Kit, not included) or (2) Code Alarm part HDRLY (SPDT relay, not included).

Note: When adding the 2 step unlock feature the BLUE/GREEN 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. An additional SPDT relay not supplied (Code Alarm part HDRLY) is required. Connect the relay as shown in diagram 15 to unlock the driver's door on the first press of unlock.

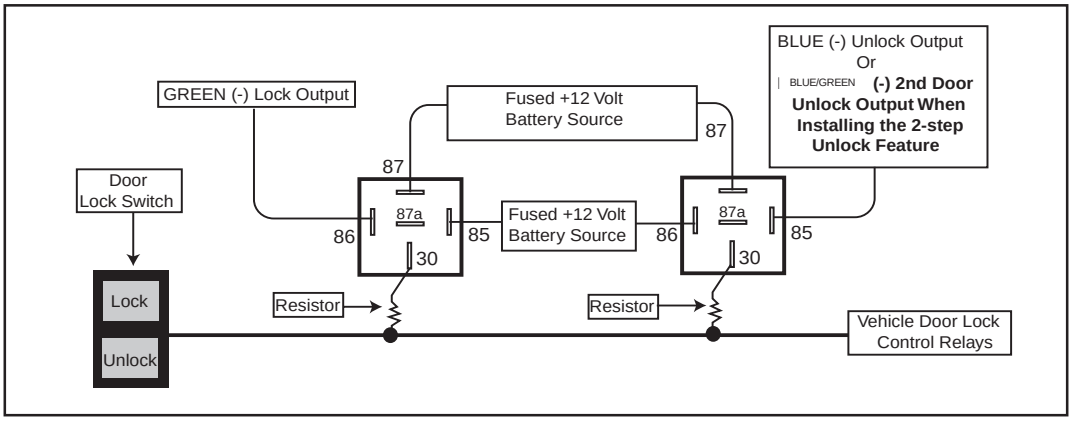
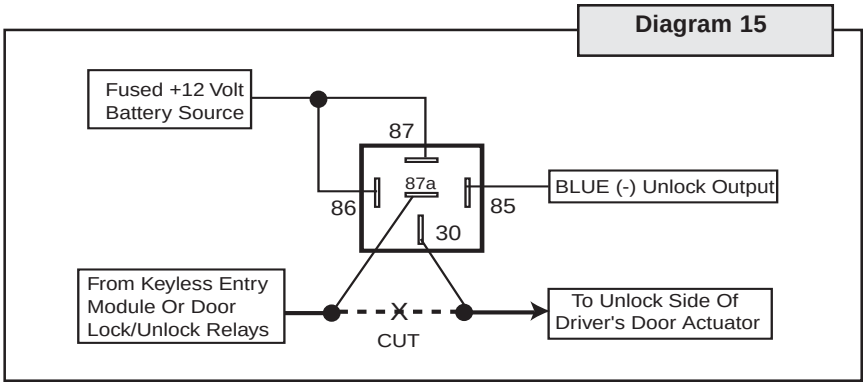


Diagram 15



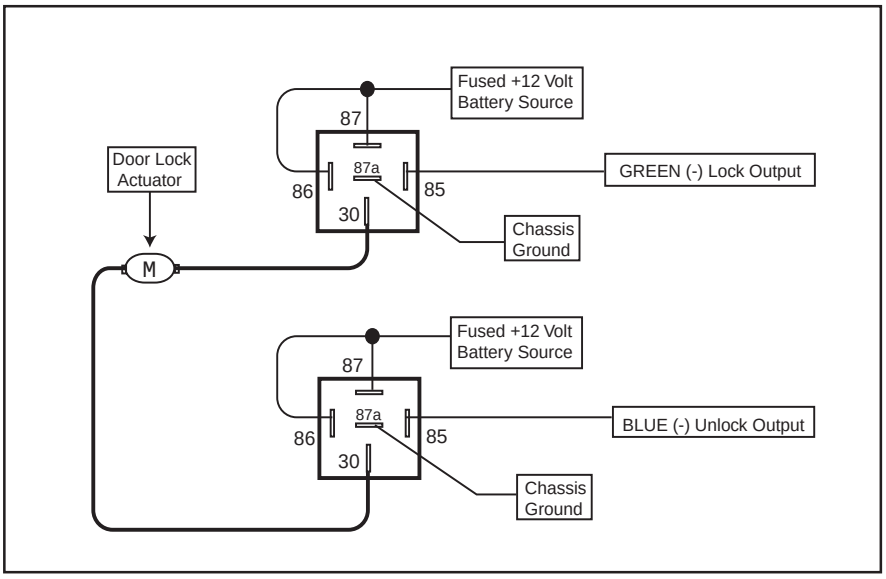
4. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (BLUE/GREEN)

Adding Aftermarket Actuators

- After installing aftermarket actuators, Code Alarm part DA-1 (not supplied). Connect the GREEN and BLUE wires shown in diagram 16 below. Use (1) Code Alarm part DLRK (Door Lock Relay Kit, not included) or (2) Code Alarm part HDRLY (SPDT relay, not included).



5. ACC. CONNECTOR'S

2 Pin Valet/Program/Override Push-Button Switch: ***(Blue Connector)***

The Black & Grey twin lead wires loaded in the two pin blue connector are the ground supply and program/valet/override input of the Remote Start unit. Drill a 9/32" hole and mount this switch in an easily accessible location under the driver's dashboard.

4 Pin Antenna/Receiver Connector: ***(Black Connector)***

Mount the supplied antenna/receiver to a clear spot on the vehicle's winshield that will not block the driver's vision. A good location is usually high on the winshield near the rear view mirror. Be carefule not to mount the antenna/receiver on any metallic window film, as this will effect system range. Route the antenna/receiver cable to the control module and plug in to the 4 pin black connector.

4 Pin 2nd Shock Sensor Port: ***(White Connector)***

The Red (+12 volt), Black (ground), Blue (pre-detect) and Green (full trigger when armed) wires loaded into the white connector shell are the inputs/outputs of the shock sensor.

2 Pin LED Harness: ***(White Connector)***

The Red & Blue wires loaded into the two pin mini white connector control the anode and cathode of the dash mounted LED. Drill a 1/4" hole and mount the LED in an easy to see location on the dashboard. Be careful to check to make sure that there is enough clearence behind the panel you are drilling into.

6. SYSTEM POWER-UP PROCEDURE

1. After all connnections are complete, turn the vehicle's ignition key to the ON position.
2. Insert the 30 Amp fuse into the fuseholder.
3. Turn the ignition key to the OFF position

7. System Testing

1. Follow each instruction below.
2. Verify that the system operates as indicated under each instruction. Refer to the system owners manual.
3. Check the appropriate wire connections and/or fuses if the unit fails to perform a specific function. Also check that any options pertaining to the function are programmed properly.

Security Operation

Press LOCK once

1. Doors lock.
2. Courtesy lights (if on) shut off.
3. Unit checks to see if doors, hood or trunk are open. If open, siren (or horn) sounds once, parking lights flash once, and system enters pre-arm mode.

Pre-arm mode:

1. The unit will wait for the open door, hood or trunk to be closed.
   The LED is solid during pre-arm.
2. If the entrance is secured, the siren/horn will sound again, parking lights will flash once, and the system will arm.
3. If the entrance is not secured after 4 minutes, the siren/horn will sound again, parking lights will flash once, the system will arm, and the defective trigger or entrance will be ignored.
   Note: If entrance is secured after 4 minutes, the system will immediately begin to monitor the entrance for intrusion.

If the above conditions are not present:

1. Vehicle starter is disabled.
2. Siren (or horn) sounds twice / parking lights flash twice.
3. LED (Blue light) flashes slowly for duration of arm cycle.
4. After 5 seconds, unit monitors all entrances and sensors.

If door, sensor, hood/trunk or ignition input is triggered:

1. Siren/horn sounds for 30 seconds or until UNLOCK is pressed.
2. Parking lights flash
3. If the alarm system is triggered, pressing DISARM (once) will end the 30-second cycle.

The LED flashes a number of times to indicate which input triggered the alarm:

Number of flashes:

1 - Interior Theft Sensor (Shock Sensor)

2 -Hood/Trunk input

3 - Door Input

7. System Testing Cont.

Press DISARM

1. Doors unlock
2. Factory alarm (if equipped) is turned off.
3. Siren/horn sounds once/ parking lights flash once.
4. Courtesy lights turn on for 30 seconds, or until ARM is pressed or ignition is turned on.
5. Vehicle starter is enabled.

.

Press DISARM twice

1. Passenger doors unlock if using 2-stage unlock.

Press FIND

Siren/horn sounds 5 times.

Press and hold PANIC for 2 seconds

Siren/horn sounds and lights flash for 30 seconds or until any remote control button is pressed.

Press and hold TRUNK

Trunk or hatch opens, or other device activates

If Ignition Lock option is set to On:

Doors lock when all doors are closed and key is turned to ON position.

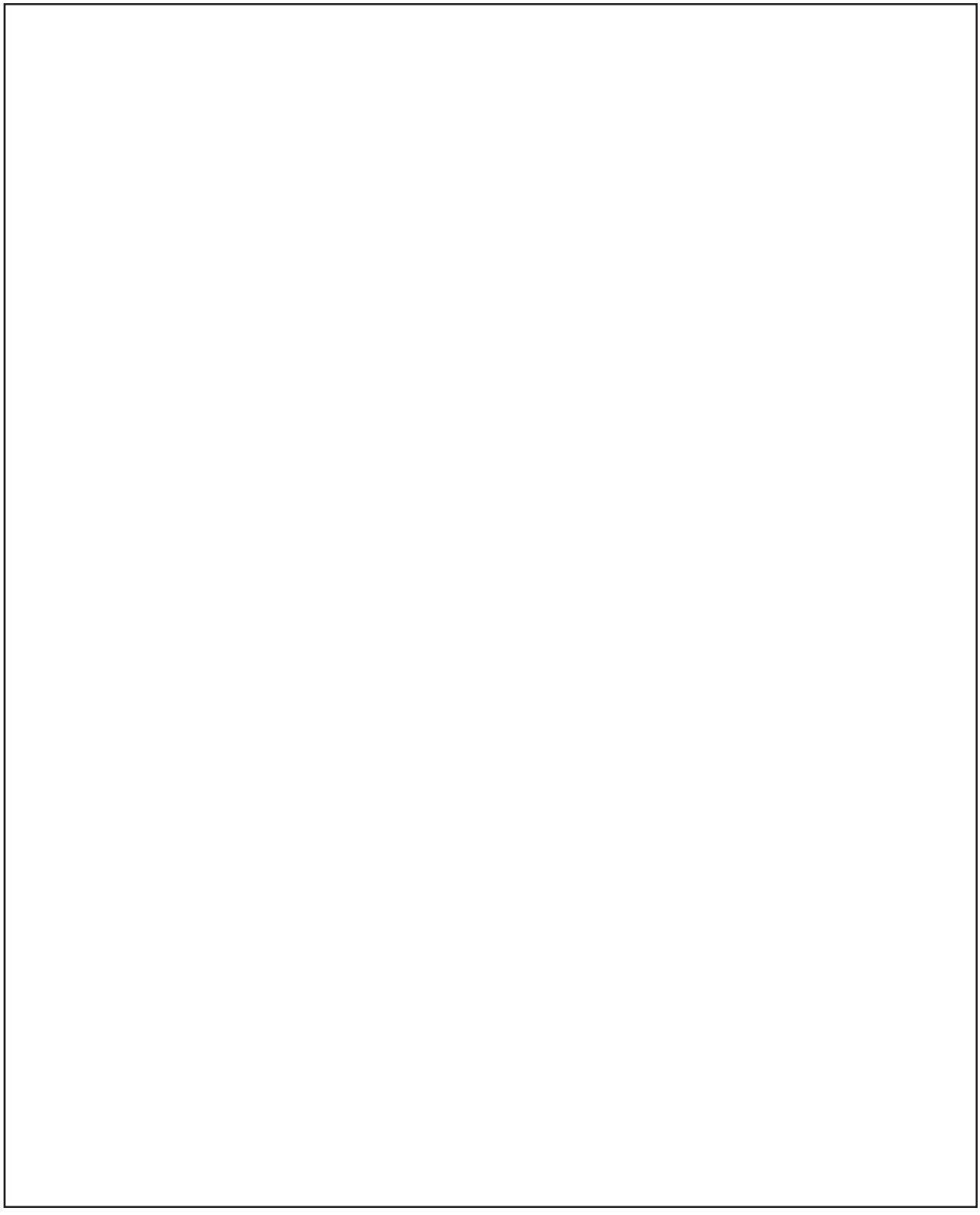
If Ignition Unlock option is set to On:

Doors unlock when ignition is turned off.

8. Mounting the Module / Finishing the Installation

1. Mount the module to a brace or wire harness under the dash. The module and harnesses must be clear of moving parts.
2. Completely uncoil the antenna and route up the nearest front window pillar to the headliner. Be careful not to pinch the antenna under vehicle panels, or route near moving parts.
3. Route the antenna across the headliner to a position behind the rearview mirror.
4. Attach the antenna to the inside of the windshield behind the rearview mirror:
   - The glass surface must be clean before mounting antenna. Use rubbing alcohol to thoroughly clean the mounting location.
   - Remove protective backing and press firmly against windshield.
5. Plug antenna into the Reciever Plug located in the back of module. (Black Connector)

Installation Complete



CODE ALARM